EXHIBIT B

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(12) EX PARTE REEXAMINATION CERTIFICATE (5932nd)

United States Patent

Payne et al.

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(54) **NETWORK SALES SYSTEM**

(75) Inventors: **Andrew C. Payne**, Lincoln, MA (US); **Lawrence C. Stewart**, Burlington, MA (US); **G. Winfield Treese**, Wayland, MA (US)

(73) Assignee: **Soverain Software LLC**, Chicago, IL (US)

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Certificate of Correction issued Apr. 6, 2004.

(51) **Int. Cl.**

G06Q 30/00	(2006.01)
G06Q 10/00	(2006.01)
G06Q 20/00	(2006.01)
G07F 7/00	(2006.01)

(52) **U.S. Cl.** **705/78**; 705/26; 705/75; 713/162

(58) **Field of Classification Search** ..... None
See application file for complete search history.

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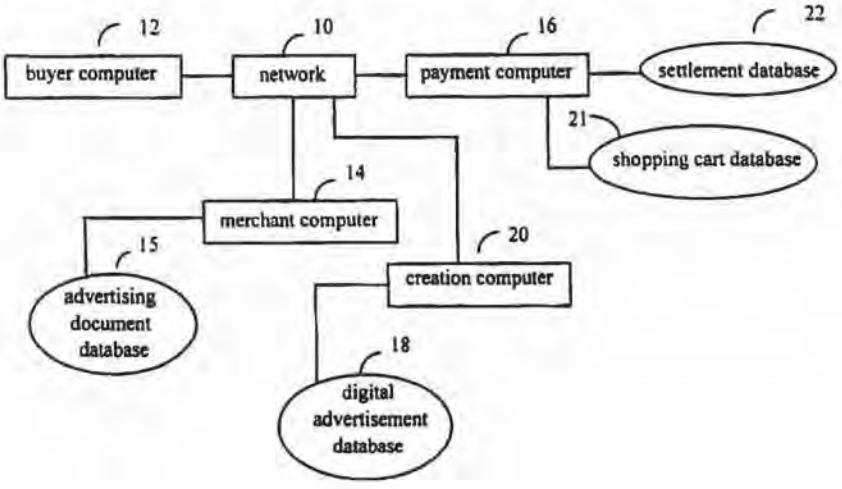
Primary Examiner—Michael O'Neill

(57) **ABSTRACT**

A network-based sales system includes at least one buyer computer for operation by a user desiring to buy a product, at least one merchant computer, and at least one payment computer. The buyer computer, the merchant computer, and the payment computer are interconnected by a computer network. The buyer computer is programmed to receive a user request for purchasing a product, and to cause a payment message to be sent to the payment computer that comprises a product identifier identifying the product. The payment computer is programmed to receive the payment message, to cause an access message to be created that comprises the product identifier and an access message authenticator based on a cryptographic key, and to cause the access message to be sent to the merchant computer. The merchant computer is programmed to receive the access message, to verify the access message authenticator to ensure that the access message authenticator was created using the cryptographic key, and to cause the product to be sent to the user desiring to buy the product.



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EX PARTE REEXAMINATION CERTIFICATE ISSUED UNDER 35 U.S.C. 307

THE PATENT IS HEREBY AMENDED AS INDICATED BELOW.

Matter enclosed in heavy brackets [ ] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

The patentability of claims **1–48** is confirmed.

New claims **49–168** are added and determined to be patentable.

49. A network-based sales system in accordance with claim 34, wherein the buyer computer activates the payment message by transmitting a message to the shopping cart computer that causes the payment message to be activated.

50. A network-based sales system in accordance with claim 34, wherein the network is a public packet switched network.

51. A network-based sales system in accordance with claim 34, wherein the network is an Internet.

52. A network-based sales system in accordance with claim 34, further comprising:

a merchant computer that is interconnected with the buyer computer and shopping cart computer by the computer network; and

an advertising document database;

wherein the merchant computer is programmed to fetch an advertising document from the advertising document database.

53. A network-based sales system in accordance with claim 52, wherein the merchant computer is programmed to send one or more advertising documents to the buyer computer.

54. A network-based sales system in accordance with claim 53, wherein the merchant computer is programmed to provide a product requested by the user.

55. A network-based sales system in accordance with claim 54, wherein the merchant computer is programmed to respond to payment orders from the buyer computer without the merchant computer having to communicate directly with the shopping cart computer to ensure that the user is authorized to purchase the product;

wherein the merchant computer is programmed to respond to payment orders from the buyer computer without the merchant computer having to store information in a database regarding which buyers are authorized to purchase which products.

56. A network-based sales system in accordance with claim 53, wherein the advertisement documents are in the form of summaries of newspaper or newsletter articles;

wherein prior to a user's product request, the merchant computer sends an advertising document to the buyer computer.

57. A network-based sales system in accordance with claim 34, wherein the buyer computer transmits an initial link that comprises information from which the shopping cart computer can create a session link message;

wherein the session link is transmitted from the shopping cart computer to the buyer computer;

wherein the session link message includes a session link authenticator for use by a computer to authenticate the session link message.

58. A network-based sales system in accordance with claim 57, wherein the session link authenticator is a cryptographic function of the session link contents.

59. A network-based sales system in accordance with claim 58, wherein the buyer computer is programmed to cause the session link message to be sent to a computer in the network which is programmed to authenticate the session link message by examining the session link authenticator and which is programmed to respond to the session link message based on state of the interaction between the buyer computer and the shopping cart computer.

60. A network-based sales system in accordance with claim 34, wherein at least one of the requests comprises a shopping cart URL.

61. A network-based sales system in accordance with claim 60, wherein the shopping cart URL comprises a domain identifier.

62. A network-based sales system in accordance with claim 60, wherein the shopping cart URL comprises a merchant identifier.

63. A network-based sales system in accordance with claim 60, wherein the shopping cart URL comprises a merchant account identifier.

64. A network-based sales system in accordance with claim 60, wherein the shopping cart URL comprises a payment amount.

65. A network-based sales system in accordance with claim 60, wherein the shopping cart URL comprises a product identifier.

66. A network-based sales system in accordance with claim 60, wherein the shopping cart URL comprises a duration time.

67. A network-based sales system in accordance with claim 60, wherein the shopping cart URL comprises an expiration time.

68. A network-based sales system in accordance with claim 67, wherein the shopping cart computer transmits a document to the buyer computer indicating that the expiration time has passed.

69. A network-based sales system in accordance with claim 60, wherein the URL comprises a buyer network address.

70. A network-based sales system in accordance with claim 69, wherein the buyer computer network address is verified by matching it with a network address specified in the shopping cart URL.

71. A network-based sales system in accordance with claim 70, wherein if the computer network address verification fails, then the shopping cart computer sends a document to the buyer computer indicating that access is not allowed.

72. A network-based sales system in accordance with claim 60, wherein the shopping cart URL comprises an authenticator based on a cryptographic key;

wherein the authenticator is a function of contents of the shopping cart URL;

wherein the shopping cart computer verifies whether the shopping cart URL authenticator was created from the contents of the shopping cart URL using a cryptographic key.

73. A network-based sales system in accordance with claim 72, wherein if the verification fails, the shopping cart

computer transmits a document to the buyer computer indicating that access is denied.

74. A network-based sales system in accordance with claim 34, wherein the buyer computer activates the payment message by transmitting a message to the shopping cart computer that causes the payment message to be activated;

wherein the shopping cart computer transmits a payment confirmation document to the buyer computer.

75. A network-based sales system in accordance with claim 74, wherein the payment confirmation document includes an open link and a continue link.

76. A network-based sales system in accordance with claim 75, wherein the shopping cart computer opens a new account in response to the user selecting the open link.

77. A network-based sales system in accordance with claim 76, wherein the buyer computer sends a payment URL to the shopping cart computer that indicates that an account does not yet exist.

78. A network-based sales system in accordance with claim 77, wherein the shopping cart computer creates a new account document.

79. A network-based sales system in accordance with claim 78, wherein the shopping cart computer transmits the new account document to the buyer computer.

80. A network-based sales system in accordance with claim 79, wherein the new account document comprises a challenge form that requests account information to be entered by the user.

81. A network-based sales system in accordance with claim 80, wherein the account information comprises a new account name and account password.

82. A network-based sales system in accordance with claim 80, wherein the account information comprises: a new account name, an account password, a credit card number, and an expiration date of the credit card.

83. A network-based sales system in accordance with claim 80, wherein the account information comprises security information.

84. A network-based sales system in accordance with claim 34, wherein the shopping cart computer, in response to the plurality of shopping cart messages, causes an account name and password request message to be transmitted to the buyer computer.

85. A network-based sales system in accordance with claim 34, further comprising:

a merchant computer that is interconnected with the buyer and shopping cart computers by the computer network; and

an advertising document database;

wherein the merchant computer is programmed to fetch an advertising document from the advertising document database;

wherein the advertising document database is local to the merchant computer.

86. A network-based sales system in accordance with claim 85, wherein a creation computer updates the remote advertising document database on the merchant computer.

87. A network-based sales system in accordance with claim 85, wherein the buyer computer transmits a purchase product message to the merchant computer, and, in response, the merchant computer provides a payment URL to the buyer computer.

88. A network-based sales system in accordance with claim 87, wherein the buyer computer transmits the payment URL to a payment computer.

89. A network-based sales system in accordance with claim 88, wherein the payment computer is the shopping cart computer.

90. A network-based sales system in accordance with claim 88, wherein the payment URL comprises an authenticator based on a cryptographic key;

wherein the authenticator is a function of contents of the payment URL.

91. A network-based sales system in accordance with claim 90, wherein the payment computer verifies whether the payment URL authenticator was created from the contents of the payment URL using a cryptographic key;

if the verification fails, the payment computer transmits a document to the buyer computer indicating that access is denied.

92. A network-based sales system in accordance with claim 88, wherein the payment URL further comprises an expiration time.

93. A network-based sales system in accordance with claim 92, wherein the payment computer transmits a document to the buyer computer indicating that the expiration time has passed.

94. A network-based sales system in accordance with claim 88, wherein the payment URL comprises a buyer network address.

95. A network-based sales system in accordance with claim 94, wherein the buyer computer network address is verified by matching it with the network address specified in the payment URL;

if the verification fails, then the shopping cart computer sends a document to the buyer computer indicating that access is not allowed.

96. A network-based sales system in accordance with claim 88, wherein the payment computer transmits a payment confirmation document to the buyer computer;

wherein the payment confirmation document includes an open link and a continue link;

wherein in response to the user selecting the continue link, the payment computer instructs the buyer computer to provide an account name and password that have previously been provided by the buyer computer to the payment computer.

97. A network-based sales system in accordance with claim 96, wherein the buyer computer prompts the user for the account name and password by creating an account name prompt and a password prompt.

98. A network-based sales system in accordance with claim 97, wherein the payment computer verifies that the account name and password entered by the user match a previously provided account name and password.

99. A network-based sales system in accordance with claim 98, wherein if the verification fails, then the payment computer sends a document to the buyer computer indicating that access is not allowed.

100. A network-based sales system in accordance with claim 98, wherein if a payment amount exceeds a threshold, then the user is prompted for security information;

wherein the payment computer verifies that the security information matches a previously provided account name and password;

if the verification fails, then the payment computer sends a document to the buyer computer indicating that access is not allowed.

101. A network-based sales system in accordance with claim 98, further comprising a settlement database that is in communication with the payment computer;

wherein the settlement database is used to determine whether the user has unexpired access to a domain identified in the payment message;

wherein the user is presented with an option to repurchase or to use the unexpired access.

102. A network-based sales system in accordance with claim 101, wherein the purchase of a product in a certain domain by a user account entitles access to other products in the domain for free or at a reduced price.

103. A network-based sales system in accordance with claim 98, wherein the payment computer verifies whether the user account has sufficient funds or credit that satisfies a payment amount specified in the paymem message,

if the verification fails, then the payment computer sends a document to the buyer computer indicating that the user has insufficient funds.

104. A network-based sales system in accordance with claim 98, wherein the payment computer records an end of duration time in a settlement database.

105. A network-based sales system in accordance with claim 98, wherein the payment computer creates an access URL including an access URL authenticator that is a digital signature generated based on a cryptographic key;

wherein the access URL authenticator is a hash of other information in the access URL;

wherein the payment computer sends a redirect to the access URL to the buyer computer;

wherein the buyer computer sends the access URL to a merchant computer.

106. A network-based sales system in accordance with claim 105, wherein the merchant computer verifies whether the access URL authenticator was created from said other information in the access URL using the cryptographic key;

if the verification fails, then the merchant computer sends a document to the buyer computer indicating that access is not allowed.

107. A network-based sales system in accordance with claim 105, wherein the merchant computer verifies whether a duration time for access has expired;

if the verification fails, then the merchant computer sends a document to the buyer computer indicating that the duration time has expired.

108. A network-based sales system in accordance with claim 105, wherein the merchant computer verifies that a buyer computer network address is the same as a buyer network address contained in the access URL;

if the verification fails, then the merchant computer sends a document to the buyer computer indicating that access is not allowed.

109. The method of claim 39, wherein the buyer computer activates the payment message by transmitting a message to the shopping cart computer that causes the payment message to be activated.

110. The method of claim 39, wherein the network is a public packet switched network.

111. The method of claim 39, wherein the network is an Internet.

112. The method of claim 39, wherein a merchant computer is interconnected with the buyer computer and shopping cart computer by the computer network;

wherein the merchant computer is programmed to fetch an advertising document from an advertising document database.

113. The method of claim 112, wherein the merchant computer is programmed to send one or more advertising documents to the buyer computer.

114. The method of claim 113, wherein the merchant computer is programmed to provide a product requested by the user.

115. The method of claim 114, wherein the merchant computer is programmed to respond to payment orders from the buyer computer without the merchant computer having to communicate directly with the shopping cart computer to ensure that the user is authorized to purchase the product;

wherein the merchant computer is programmed to respond to payment orders from the buyer computer without the merchant computer having to store information in a database regarding which buyers are authorized to purchase which products.

116. The method of claim 113, wherein the advertisement documents are in the form of summaries of newspaper or newsletter articles;

wherein prior to a user's product request, the merchant computer sends an advertising document to the buyer computer.

117. The method of claim 39, wherein the buyer computer transmits an initial link that comprises information from which the shopping cart computer can create a session link message;

wherein the session link is transmitted from the shopping cart computer to the buyer computer;

wherein the session link message includes a session link authenticator for use by a computer to authenticate the session link message.

118. The method of claim 117, wherein the session link authenticator is a cryptographic function of the session link contents.

119. The method of claim 118, wherein the buyer computer is programmed to cause the session link message to be sent to a computer in the network which is programmed to authenticate the session link message by examining the session link authenticator and which is programmed to respond to the session link message based on state of the interaction between the buyer computer and the shopping cart computer.

120. The method of claim 39, wherein at least one of the requests comprises a shopping cart URL.

121. The method of claim 120, wherein the shopping cart URL comprises a domain identifier.

122. The method of claim 120, wherein the shopping cart URL comprises a merchant identifier.

123. The method of claim 120, wherein the shopping cart URL comprises a merchant account identifier.

124. The method of claim 120, wherein the shopping cart URL comprises a payment amount.

125. The method of claim 120, wherein the shopping cart URL comprises a product identifier.

126. The method of claim 120, wherein the shopping cart URL comprises a duration time.

127. The method of claim 120, wherein the shopping cart URL comprises an expiration time.

128. The method of claim 127, wherein the shopping cart computer transmits a document to the buyer computer indicating that the expiration time has passed.

129. The method of claim 120, wherein the URL comprises a buyer network address.

130. The method of claim 129, wherein the buyer computer network address is verified by matching it with a network address specified in the shopping cart URL.

131. The method of claim 130, wherein if the computer network address verification fails, then the shopping cart computer sends a document to the buyer computer indicating that access is not allowed.

132. The method of claim 120, wherein the shopping cart URL comprises an authenticator based on a cryptographic key;

wherein the authenticator is a function of contents of the shopping cart URL;

wherein the shopping cart computer verifies whether the shopping cart URL authenticator was created from the contents of the shopping cart URL using a cryptographic key.

133. The method of claim 132, wherein if the verification fails, the shopping cart computer transmits a document to the buyer computer indicating that access is denied.

134. The method of claim 39, wherein the buyer computer activates the payment message by transmitting a message to the shopping cart computer that causes the payment message to be activated;

wherein the shopping cart computer transmits a payment confirmation document to the buyer computer.

135. The method of claim 134, wherein the payment confirmation document includes an open link and a continue link.

136. The method of claim 135, wherein the shopping cart computer opens a new account in response to the user selecting the open link.

137. The method of claim 136, wherein the buyer computer sends a payment URL to the shopping cart computer that indicates that an account does not yet exist.

138. The method of claim 137, wherein the shopping cart computer creates a new account document.

139. The method of claim 138, wherein the shopping cart computer transmits the new account document to the buyer computer.

140. The method of claim 139, wherein the new account document comprises a challenge form that requests account information to be entered by the user.

141. The method of claim 140, wherein the account information comprises a new account name and account password.

142. The method of claim 140, wherein the account information comprises: a new account name, an account password, a credit card number, and an expiration date of the credit card.

143. The method of claim 140, wherein the account information comprises security information.

144. The method of claim 39, wherein the shopping cart computer, in response to the plurality of shopping cart messages, causes an account name and password request message to be transmitted to the buyer computer.

145. The method of claim 39, wherein a merchant computer is interconnected with the buyer and shopping cart computers by the computer network;

wherein the merchant computer is programmed to fetch an advertising document from an advertising document database;

wherein the advertising document database is local to the merchant computer.

146. The method of claim 145, wherein a creation computer updates the remote advertising document database on the merchant computer.

147. The method of claim 145, wherein the buyer computer transmits a purchase product message to the merchant computer, and, in response, the merchant computer provides a payment URL to the buyer computer.

148. The method of claim 147, wherein the buyer computer transmits the payment URL to a payment computer.

149. The method of claim 148, wherein the payment computer is the shopping cart computer.

150. The method of claim 148, wherein the payment URL comprises an authenticator based on a cryptographic key;

wherein the authenticator is a function of contents of the payment URL.

151. The method of claim 150, wherein the payment computer verifies whether the payment URL authenticator was created from the contents of the payment URL using a cryptographic key;

if the verification fails, the payment computer transmits a document to the buyer computer indicating that access is denied.

152. The method of claim 148, wherein the payment URL further comprises an expiration time.

153. The method of claim 152, wherein the payment computer transmits a document to the buyer computer indicating that the expiration time has passed.

154. The method of claim 148, wherein the payment URL comprises a buyer network address.

155. The method of claim 154, wherein the buyer computer network address is verified by matching it with the network address specified in the payment URL;

if the verification fails, then the shopping cart computer sends a document to the buyer computer indicating that access is not allowed.

156. The method of claim 148, wherein the payment computer transmits a payment confirmation document to the buyer computer;

wherein the payment confirmation document includes an open link and a continue link;

wherein in response to the user selecting the continue link, the payment computer instructs the buyer computer to provide an account name and password that have previously been provided by the buyer computer to the payment computer.

157. The method of claim 156, wherein the buyer computer prompts the user for the account name and password by creating an account name prompt and a password prompt.

158. The method of claim 157, wherein the payment computer verifies that the account name and password entered by the user match a previously provided account name and password.

159. The method of claim 158, wherein if the verification fails, then the payment computer sends a document to the buyer computer indicating that access is not allowed.

160. The method of claim 158, wherein if a payment amount exceeds a threshold, then the user is prompted for security information;

wherein the payment computer verifies that the security information matches a previously transmitted account name and password;

if the verification fails, then the payment computer sends a document to the buyer computer indicating that access is not allowed.

161. The method of claim 158, wherein a settlement database is used to determine whether the user has unexpired access to a domain identified in the payment message;

wherein the user is presented with an option to repurchase or to use the unexpired access.

162. The method of claim 161, wherein the purchase of a product in a certain domain by a user account entitles access to other products in the domain for free or at a reduced price.

163. The method of claim 158, wherein the payment computer verifies whether the user account has sufficient funds or credit that satisfies a payment amount specified in the payment message,

if the verification fails, then the payment computer sends a document to the buyer computer indicating that the user has insufficient funds.

164. The method of claim 158, wherein the payment computer records an end of duration time in a settlement database.

165. The method of claim 158, wherein the payment computer creates an access URL including an access URL authenticator that is a digital signature generated based on a cryptographic key;

wherein the access URL authenticator is a hash of other information in the access URL;

wherein the payment computer sends a redirect to the access URL to the buyer computer;

wherein the buyer computer sends the access URL to a merchant computer.

166. The method of claim 165, wherein the merchant computer verifies whether the access URL authenticator was created from said other information in the access URL using the cryptographic key;

if the verification fails, then the merchant computer sends a document to the buyer computer indicating that access is not allowed.

167. The method of claim 165, wherein the merchant computer verifies whether a duration time for access has expired;

if the verification fails, then the merchant computer sends a document to the buyer computer indicating that the duration time has expired.

168. The method of claim 165, wherein the merchant computer verifies that a buyer computer network address is the same as a buyer network address contained in the access URL;

if the verification fails, then the merchant computer sends a document to the buyer computer indicating that access is not allowed.

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